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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,501	12/19/2001	Joseph S. Wycech	M 6385A	9344

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HENKEL CORPORATION  
THE TRIAD, SUITE 200  
2200 RENAISSANCE BLVD.  
GULPH MILLS, PA 19406

EXAMINER
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VO, HAI

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/026,501

**Applicant(s)**

WYCECH, JOSEPH S.

**Examiner**

Hai Vo

**Art Unit**

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 and 30-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-34 is/are allowed.
- 6) ☒ Claim(s) 1-18, 35 and 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1771

1. Claims 30-34 are allowed.
2. The 112 claim rejections and all of the art rejections with respect to claims 19, 22-24, 28, 29, 37-41 and 44-51 are considered moot in view of the claim cancellation.
3. The indicated allowability of claims 1-18, 35 and 36 is withdrawn in view of Nomura et al (US 4,128,683) and the 112 claim rejections. Therefore, the finality of that action is withdrawn.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-18, 35 and 36 rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The presence of a compliant layer and a rigid layer in the tri-laminate stiffener are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The compliant layer absorbs shrinkage strains from the rigid layer and thus blocks the shrinkage strains from getting to the substrate.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-18, 35 and 36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. The language in claim 1 renders it indefinite. The phrase "capable upon activation of becoming a rigid reinforcement foam" indicates that the action of becoming a rigid reinforcement foam is a future action which may be done but is not required to be done.

Similarly, the same token is applied to the words "capable upon activation of becoming a compliant foam". On the other hand, the claims are directed to the laminate wherein the second foamable layer absorbs shrinkage strains due to heat cure of said second foamable layer and cooling of the substrate and it is not clear that the second foamable layer is able to absorb the shrinkage strains before foaming activation because the shrinkage strains from the rigid layer is transferred to the compliant layer only after foaming activation accordance to Applicant's disclosure. It appears that the claims are not limited as intended by Applicants. The claims are thus indefinite.

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3-14, 18 and 36 are rejected under 35 U.S.C. 102(b) as being anticipated by Nomura et al (US 4,128,683). The phrase "capable upon activation of becoming a rigid reinforcement foam" indicates that the action of becoming a rigid reinforcement foam is a future action which may be done but is

not required to be done. Similarly, the same token is applied to the words “capable upon activation of becoming a compliant foam”. Accordingly, the first rigid foam and the second compliant foam are not required to be part of the laminate. The presently claimed laminate structure does not exclude the auto ceiling panel of Nomura. Nomura teaches an auto ceiling panel comprising a vinyl chloride sheet 4, a first polyethylene foam 2, a metal lath 1, and a second polyethylene foam 3. The first polyethylene foam and the vinyl chloride sheet are provided with a plurality of small holes through two layers while the second polyethylene foam is provided with a plurality of through holes with a diameter larger than that of the small holes (see figure 1). Normura also teaches that at least one of the small holes overlapping the larger hole becomes through one (figure 1, column 2, lines 35-36). Likewise, the pattern of holes creating open passageways completely through the panel. The auto ceiling panel has a pair of longitudinal side edges interconnected by a pair of transverse end edges wherein at least one of the pair of side edges and end edges have a pattern of hills and valleys joint together to be non-straight and undulated (figures 2 and 5). The second foam layer is intimately bonded directly to the ceiling of the vehicle that corresponds to Applicant’s substrate. Figure 2 of Nomura shows at least one rib formed by the first and second foam layers and polyvinyl chloride sheet forming a minor interruption of the continuous contour. Figure 2 of Nomura also shows end flanges extending in the same direction as each other and as the rib away from the continuous contour. Nomura discloses the second foam layer 3 having a

Art Unit: 1771

density from 0.02 to 0.1 g/cc (column 2, lines 18-20), which is low enough to be considered as a compliant foam. Figure 2 shows the pattern of holes randomly arranged. It is the examiner's position that Nomura anticipates the claimed subject matter.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 15-17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al (US 4,128,683). Normura does not specifically disclose the sound absorbing panel being used in combination with an automobile door. However, it is believed that once the prior art renders obvious the use of the sound absorbing panel as an auto ceiling panel, the use of the sound absorbing panel in combination with a particular component of the vehicle; i.e, vehicle door is not a patentable advance but involves only routine skill in the art to attenuate the interior noise in the vehicle. Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the sound absorbing absorption panel in combination with the vehicle door motivated by the desire to attenuate the interior noise in the vehicle.

Figure 1 shows that the distance between the adjacent holes is about the same across the length of the laminate. Nomura does not specifically teach the pattern of holes in the rows and columns as recited in the claims. It is believed that once the prior art renders obvious formation of the plurality of holes through the laminate, the orientation of such through holes is not a patentable advance but involves only routine skill in the art to ensure a good effect of sound absorption of the panel. Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the auto ceiling panel having a pattern of the through holes instantly claimed motivated by the desire to ensure a good effect of sound absorption.

12. Claims 2 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al (US 4,128,683) as applied to claim 1 above, further in view of Daniel (US 4,234,907). Nomura does not teach the skin formed from either metal or fiberglass cloth. Therefore, it is necessary and thus obvious for the skilled artisan to look to the prior art for the use of such materials as the decorative skin of the vehicle ceiling panel. Daniel teaches the automotive ceiling panel having the decorative skin made from the light emitting fabrics which are backed with a metal (figure 3). Therefore, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ light emitting fabrics as the decorative skin of Nomura motivated by the desire to effect the decorative illumination.

**Conclusion**

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (571) 272-1485. The examiner can normally be reached on M,T,Th, F, 7:00-4:30 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HV

Hai Vo  
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